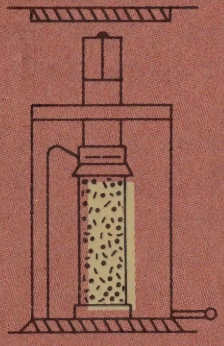
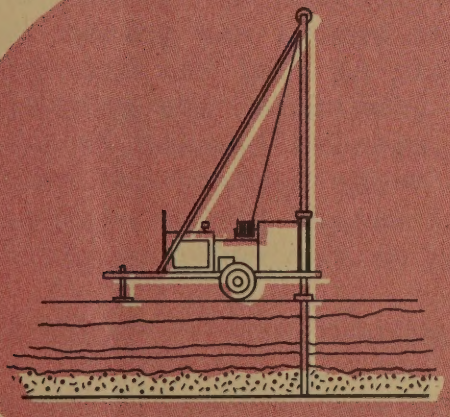
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

RAYMOND T. SCHULER, COMMISSIONER

SOIL MECHANICS
BUREAU





TEST WELL REPORT
ARIETTA MAINTENANCE PATROL SITE
CONTRACT LD 75-18
HAMILTON COUNTY
PIN 2800.37.301

APRIL, 1976

SM 238b (1/73)

MEMORANDUM
DEPARTMENT OF TRANSPORTATION

DATE April 1, 1976

SUBJECT TEST WELL CONSTRUCTION REPORT
ARIETTA MAINTENANCE PATROL SITE
PIN 2800.37-301 HAMILTON COUNTY

FROM A. Yatsevitch, Senior Engineering Geologist A. Yatsevitch

TO E. M. Moody, Associate Soils Engineer ✓

On January 26, 1976 this writer met at the site of the subject project with Mr. E. Blessing (E.I.C.) to stake out the well location prior to the anticipated arrival of the contractor that same afternoon. Due to bad weather delays the contractor was not able to reach the site and get set up to start drilling until January 28, 1976. Delays pertaining to contractor's insurance certificates allowed work to start on January 29, 1976 at which time a roller bit was used to progress a 6" diameter hole through the overburden to rock at approximately 42'. A large boulder and cobbles at approximately 20' required the use of a 15" diameter bit to place the 12" casing prescribed for grouting. Delays due to bad weather postponed the installation of the 12" pipe to the required depth and the seating of the 6" casing approximately 1.5 feet into rock until February 2, 1976.

On ~~January~~ FEBRUARY 2 drilling was resumed and only small quantities of water, totaling less than 1.5 GPM. were encountered, until at a total depth of 199 feet a seam approximately 2.5 feet thick in the otherwise sound rock yielded slightly over 15 G.P.M. The broken zone of the seam was thoroughly cleaned out by multiple passes of the drill bit and an additional ten feet was drilled for storage and catchment of particulates below the water producing zone. On February 11 grouting was completed. The 12" outer casing was lodged in the boulders and cobbles of the overburden and was left in place by the contractor for fear of dislodging the relatively short length (43 ft.±) of 6" casing in the withdrawal process. The upper 6 feet of annular space between the casings above the grout was filled with sand to facilitate making connections to the well at a later date. The drilling rig departed on this date.

On February 17 the pumping crew arrived, disinfected the well and conducted the 12 hour pumping test. On the following morning (another blizzard) this writer met at the project site with Mr. Blessing and received the water samples taken at the conclusion of the pump test and delivered them to the D.O.H. laboratories for analyses. The results of the analyses are attached as well as a

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Albany, New York 12232

well log made up by this writer from the well samples and a tabulation of the pumping test. Provisions have been made by Mr. Blessing to have a plate cap welded on the well casing to provide a tamper-proof seal.

AY:MVM
Attachment

NEW YORK STATE DEPARTMENT OF HEALTH
DIVISION OF LABORATORIES AND RESEARCH
ENVIRONMENTAL HEALTH CENTER

RESULTS OF EXAMINATION
(PAGE 1 OF 2)

LAB ACCESSION NO: 00908 YR/MO/DAY/HR SAMPLE REC'D: 76/02/18/11

REPORTING LAB: 10 GRIFFIN LAB
PROGRAM: 820 NYS DEPT. OF TRANSP.
STATION (SOURCE) NO:
DRAINAGE BASIN: NY GAZETTEER NO: 2050 COUNTY: HAMILTON
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: ARIETTA

EXACT SAMPLING POINT: MAINT PATROL SITE 6075 18
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 02/18/01
REPORT SENT TO: CO (1) RO (0) LPHE (0) LHO (0) FED (0) CHEM (0)

	PARAMETER	UNIT	RESULT	NOTATION
000100	COLOR (APPARENT)		0.	
000200	TURBIDITY J.T.U.		0.13	
000300	ODOR, HOT		1.VEGET	
000501	NITROGEN, AMMONIA	MG/L	0.0960	+/- 6%
000709	NITROGEN, NITRITE	MCG/L	1.87	LT
000801	NITROGEN,NITRATE	MG/L	0.294	+/-15%
001001	CHLORIDE	MG/L	2.57	+/-31%
001101	HARDNESS, TOTAL AS CACO3	MG/L	45.	
001501	ALKALINITY,M'ORANGE,	MG/L	48.	
001900	PH (LABORATORY)		8.1	
006501	C.O.D.	MG/L	4.	
010001	IRON	MG/L	0.05	LT
010201	MANGANESE	MG/L	0.02	LT

DATE COMPLETED: 3/22/76

DEPUTY CHIEF ENGINEER,TECHNICAL SERVICES
NYS DEPT.OF TRANSPORTATION, BLDG. 7A
1220 WASHINGTON AVENUE
ALBANY, N.Y. 12226

SUBMITTED BY: WP HOFMAN

NEW YORK STATE DEPARTMENT OF HEALTH
DIVISION OF LABORATORIES AND RESEARCH
ENVIRONMENTAL HEALTH CENTER

RESULTS OF EXAMINATION
(PAGE 2 OF 2)

LAB ACCESSION NO: 00908 YR/MO/DAY/HR SAMPLE REC'D: 76/02/18/11

REPORTING LAB: 10 GRIFFIN LAB
PROGRAM: 820 NYS DEPT. OF TRANSP.
STATION (SOURCE) NO:
DRAINAGE BASIN: NY GAZETTEER NO: 2050 COUNTY: HAMILTON
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: ARIETTA

EXACT SAMPLING POINT: MAINT PATROL SITE 6075 18
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 02/18/01
REPORT SENT TO: CO (1) RO (0) LPHE (0) LHO (0) FED (0) CHEM (0)

	PARAMETER	UNIT	RESULT	NOTATION
010701	SODIUM	MG/L	4.6	
100300	ODOR, COLD		1,VEGET	

DATE COMPLETED: 3/22/76

DEPUTY CHIEF ENGINEER,TECHNICAL SERVICES
NYS DEPT.OF TRANSPORTATION, BLDG. 7A
1220 WASHINGTON AVENUE
ALBANY, N.Y. 12226

SUBMITTED BY: WP HOFMAN

NEW YORK STATE DEPARTMENT OF HEALTH
DIVISION OF LABORATORIES AND RESEARCH
ENVIRONMENTAL HEALTH CENTER

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 00861 YR/MO/DAY/HR SAMPLE REC'D: 76/02/18/14

REPORTING LAB: 01 CENTRAL AVE. LAB
PROGRAM: 820 NYS DEPT. OF TRANSP.
STATION (SOURCE) NO:
DRAINAGE BASIN: NY GAZETTEER NO: 2050 COUNTY: HAMILTON
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: MAINT PATROL SITE LD75 1B T. ARIETTA

EXACT SAMPLING POINT: DIRECT FROM WELL
TYPE OF SAMPLE: 16 PRIVATE SUPPLY, MISCELL.
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 02/18/13
REPORT SENT TO: CO (2) RO (0) LPHE (0) LHO (0) FED (0) CHEM (0)

PARAMETER		UNIT	RESULT	NOTATION
026800	STD.PLATE COUNT 48 HR /ML		1.	LT
027000	COLIF. MF COL/100ML		1.	LT

DATE COMPLETED: 3/18/76

DEPUTY CHIEF ENGINEER,TECHNICAL SERVICES
NYS DEPT.OF TRANSPORTATION, BLDG. 7A
1220 WASHINGTON AVENUE
ALBANY, N.Y. 12226

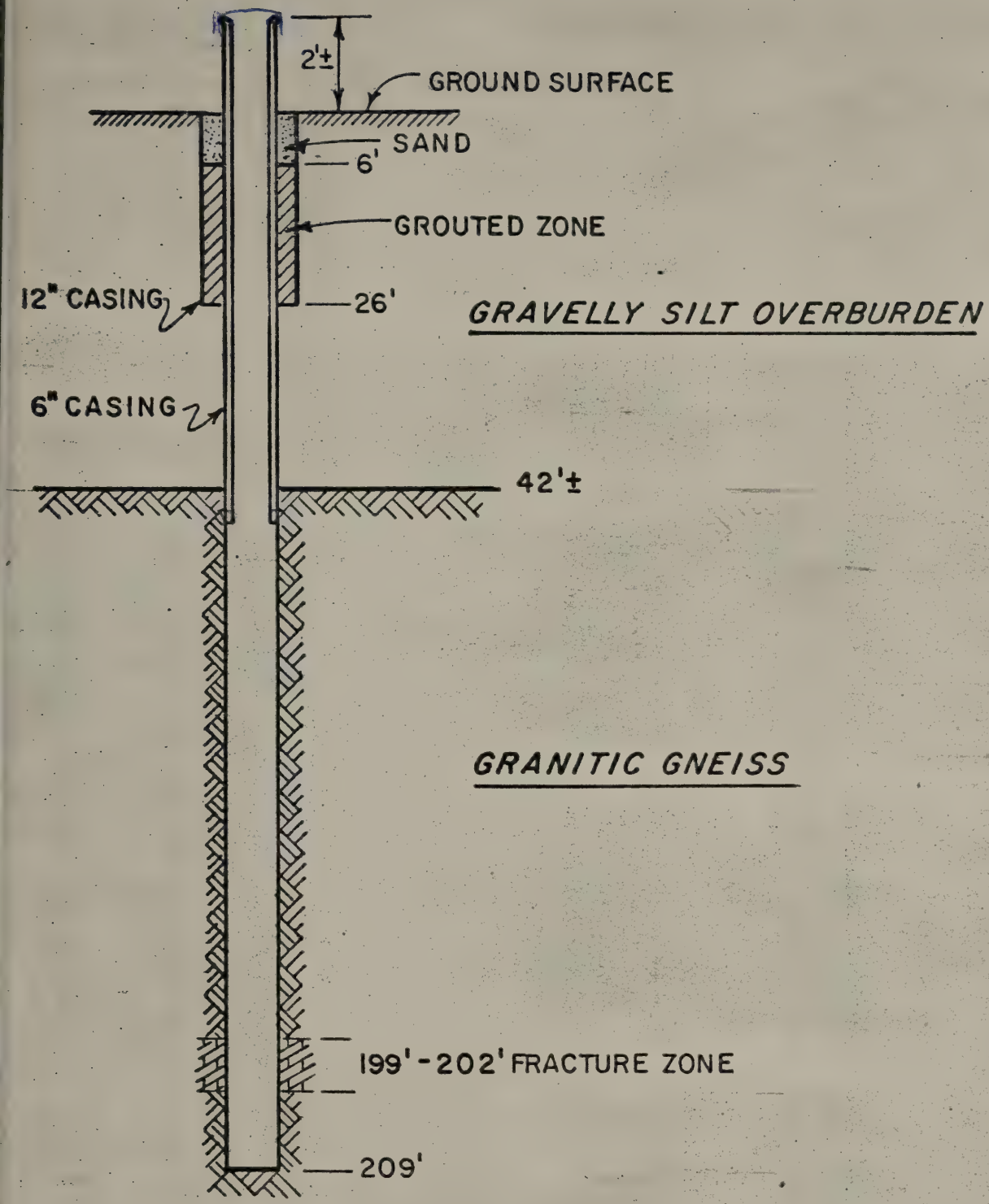
SUBMITTED BY: HOFMANN

ARIETTA TEST WELL NO. 1
PIN 2800.37-301

WELL LOG

0-10'	Coarse sandy gravel, some silt. Med. yellowish tan. Weathered granitic chips.
10-20'	Fine sandy silt. Some gravel. Med. yellowish tan. Weathered granitic chips.
20-30'	Med. sandy silt. Some gravel. Med. yellowish tan. Weathered granitic chips.
30-40'	Med. sandy silt. Trace gravel. Med. yellowish tan. Weathered granitic chips.
40-50'	Quartzitic, leukogranitic garnetiferous gneiss. Rock at 42'±.
55'	Garnetiferous biotite granitic gneiss.
60'	" " " "
65'	Garnetiferous mafic granitic gneiss.
70'	Garnetiferous quartz-biotite granitic gneiss.
75'	Garnetiferous biotite granitic gneiss.
80'	" " " "
85'	" " " "
90'	" " " "
95'	Garnetiferous quartz biotite granitic gneiss. Predominantly salmon feldspar.
100'	Garnetiferous quartz biotite granitic gneiss. Some salmon feldspar.
105'	Garnetiferous biotite granitic gneiss. Some salmon feldspar.
110'	" " " " " " "
115'	Garnetiferous biotite granitic gneiss. Trace salmon feldspar.
120'	" " " " " " "
125'	" " " " ----
130'	" " " " ----
135'	Garnetiferous biotite granitic gneiss. Some salmon feldspar.
140'	" " " " " " "
145'	" " " " " " "
150'	" " " " . Much salmon feldspar.
155'	" " " " . Some salmon feldspar.
160'	" " " " . Some beige feldspar.
165'	" " " " . ----
170'	" " " " . ----
175'	Garnetiferous biotite granite gneiss.
180'	" " " "
185'	" " " " . Some oxidation.
190'	" " " " . ---
195'	" " " " . Some oxidation.
200'	Garnetiferous biotite granite gneiss. Some salmon feldspar. Extensive oxidation.
209'	" " " " " " " " Extensive oxidation.

END OF LOG & WELL D 2/19/76



WELL PROFILE

P.I.N. 2800.37.301
PATROL HEADQUARTERS SITE
ARIETTA, HAMILTON COUNTY
TEST WELL No. 1

TULLY DRILLING COMPANY, INC.

Poyntelle, Pa. 18454

RECORD OF WELL PUMPING TEST

Sheet No. 1 of _____

Date February 17, 1976

OWNER New York State Dept. of Transportation
(Name and Address)

ENGINEER or ARCHITECT _____

WELL NO. 1 LOCATION: Arietta, New York

TEST RESULTS:

TIME	GPM	WATER LEVEL (FEET BELOW REF. PT.)	DRAWDOWN (FEET)	* WATER
12:15 P.M.	19	7'	METER READING	
12:16	19	10'		
12:17	19	14'		
12:18	19	18'		
12:19	19	21'		
12:20	19	23'	1394555	Clear
12:25	19	28'	1394650	"
12:30	19	31'	1394800	"
1:30	19	41.5'	1395950	"
2:00	19	45'	1396540	"
3:00	19	49'	1397690	"
4:00	19	51'	1398840	"
5:00	19	53'	1399960	"
6:00	19	54'	1401040	"
7:00	19	55'	1402190	"
8:00	19	56'	1403320	"
9:00	19	57'	1404460	"
10:00	19	58'	1405620	Clear
11:00	19	58'	1406770	"
12:00 A.M.	19	59'	1407920	"
12:20	19	59'	1408290	"

* NOTE WHETHER WATER IS CLEAR OR TURBID

00987
LRI